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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/760,439	01/20/2004	Charles E. Steffens JR.	TRW(AP)6354	9230
26294	7590	11/13/2006	EXAMINER	
TAROLLI, SUNDHEIM, COVELL & TUMMINO L.L.P. 1300 EAST NINTH STREET, SUITE 1700 CLEVEVLAND, OH 44114			DUNN, DAVID R	
			ART UNIT	PAPER NUMBER
			3616	

DATE MAILED: 11/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/760,439	STEFFENS ET AL.	
	Examiner	Art Unit	
	David Dunn	3616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office Action is responsive to the amendment filed September 1, 2006.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-4, 6, 10, 13, 15, 18, 24, 25, 28, and 31 are rejected under 35 U.S.C. 102(e) as being anticipated by Kobayashi et al. (US 6,811,182).

Kobayashi et al. discloses an apparatus comprising: a sensor (2b) responsive to a side impact event (see column 2, lines 65-67); a first vehicle occupant protection device (5) that is inflatable into a first position located beside the seat (see Figure 2; see column 3, lines 18-20); a second vehicle occupant protection device (4) that is inflatable into a second position located forward of the seat (see column 3, lines 10-15); and a controller (1) responsive to the crash event signal for immediately inflating the first vehicle occupant protection device (S10; Figure 3) and a predetermined time after inflation of the first device (S13, see also S14), inflating the second vehicle occupant protection device (S15). The first device is a side air bag (see column 3, lines 18-20), also considered a rollover air bag. The second device is configured to remain in a mostly

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inflated condition for an extended period of time (relative term). The controller is responsive to the crash event signal for inflating both the first and second devices (see Figure 3).

3. Claims 10, 11, 15, 28, 29, and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Foo et al. (US 5,746,444).

Foo et al. discloses an apparatus comprising: a sensor (42) responsive to a side impact event; a first vehicle occupant protection device being a side air bag (16); a second protection device being a front airbag (12); and a controller (60) to inflate the inflate both devices; further including a sensor responsive to a front impact (40), wherein the controller, in response to the front crash signal, inflates the front airbag (122; see Figure 4A), the controller being responsive to a subsequently received crash event for inflating the side airbag (136, Figure 4A, 150, Figure 4B).

4. Claims 19 and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Beasley, Jr. (US 2002/0140218).

Beasley, Jr. discloses an apparatus comprising a sensor (see paragraph 0004, line 4); a front airbag (paragraph 0004, line 11); a controller (inherent), the airbag configured to remain in a mostly inflated condition for 300 milliseconds (paragraph 0004, line 12). Beasley, Jr. also discloses the airbag having a sealed design to prevent fluid loss (see paragraph 0049).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 5, 8, 14, 17, 19-21, 26, 32, and 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al. in view of Beasley, Jr.

Kobayashi et al. is discussed above and fails to show the front airbag being inflated for 300 milliseconds.

Beasley, Jr. is discussed above.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kobayashi et al. with the teachings of Beasley, Jr. such that the front airbag would remain inflated for at least 300 milliseconds in order to better protect the occupant.

7. Claims 19-22, and 33-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Foo et al. in view of Beasley, Jr.

Foo et al. is discussed above and fails to show the front airbag being inflated for 300 milliseconds.

Beasley, Jr. is discussed above.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Foo et al. with the teachings of Beasley, Jr. such that the front airbag would remain inflated for at least 300 milliseconds in order to better protect the occupant.

8. Claims 7 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al. in view of Burgi et al. (US 6,019,389).

Kobayashi et al. is discussed above and fails to show the inflator having first and second actuatable stages.

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Burgi et al. teaches a dual stage inflator which can sustain the airbag for an extended period of time (see paragraph bridging columns 3 and 4).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kobayashi et al. with the teachings of Burgi et al. to provide a dual stage inflator in order to better to control the inflation of the front airbag.

9. Claims 9, 12, 27, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al. in view of Breed (US 6,209,909).

Kobayashi et al. is discussed above and fails to show a precrash sensor.

Breed teaches a restraint system comprising a precrash sensor (130) for sensing an impending impact event.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kobayashi et al. with the teachings of Breed to provide a precrash sensor in order to more quickly predict a crash to inflate to occupant protection device.

10. Claims 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al. and Beasley, Jr. and in further view of Breed (US 6,209,909).

The combination of Kobayashi et al. and Beasley, Jr. is discussed above and fails to show a precrash sensor.

Breed teaches a restraint system comprising a precrash sensor (130) for sensing an impending impact event.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Kobayashi et al. and Beasley, Jr. with the teachings of Breed to

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provide a precrash sensor in order to more quickly predict a crash to inflate to occupant protection device.

Response to Arguments

11. Applicant's arguments filed 9/1/2006 have been fully considered but they are not persuasive.

On page 13, Applicant also argues that Kobayashi “only actuates the longitudinal restraint apparatus 10 after performing operations...”. In response, it is noted that while Kobayashi includes additional features not required by Applicant's invention, Kobayashi does disclose the invention as claimed. The fact that it discloses additional features is irrelevant. Applicant also argues that Kobayashi “does not disclose or suggest that the controller 1 is responsive to a crash event signal for immediately inflating a first vehicle occupant protection device and, a predetermined time after inflation of the first vehicle occupant protection device, inflating a second vehicle occupant protection device.” Kobayashi shows a controller (see element 1 in Figure 1); the controller actuates the first airbag immediately after the crash event (see Figure 3; S10- see also column 4, lines 50-52). The controller also inflates the second device after a predetermined time (see column 4, lines 63-67).

On page 13, regarding claim 3, Applicant argues that a “side air bag is not considered a rollover air bag.” In response, it is submitted that a side air bag can be considered a rollover airbag, as a side airbag does serve to protect the occupant in the case of a rollover. See for example, US Patent 6,802,530 with the title of “Rollover Air Bag with Damping Mechanism”; this “rollover” airbag is a side airbag.

On page 15, Applicant argues that the combination of Kobayashi and Beasley, Jr. would not be obvious as the reason to combine “is speculative.” In response, it is submitted that Beasley, Jr. teaches inflating airbags for extending periods of time. The examiner maintains that it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply this teaching to Kobayashi. Applicant also argues that there is not suggestion or motivation to combine. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, motivation is found in the knowledge generally available to one of ordinary skill in the art. Applicant also states that “the Office Action does not cite a motivation...”. As noted in the rejection above, the motivation is “to better protect the occupant.”

On pages 16-17, Applicant argues that Kobayashi does “not disclose or suggest that the controller 1 is responsive to a crash event signal, which is indicative of said one of a side impact event and a rollover event, from the sensor”. As noted in the rejection above, Kobayashi shows the controller being responsive to a side impact event (column 2, lines 65-67; see also column 3, lines 1-5; then see also Figure 3, the controller inflates the devices after receiving the crash signal).

On page 19, Applicant argues again that the Office Action “does not cite a motivation or suggestion to modify...”. As set forth in the rejection, one of ordinary skill in the art would have been motivated to make the modification “to better protect the occupant.”

On page 19, Applicant argues that the rejection does not show the inflated device in the first position for 300 milliseconds. As clearly set forth in the rejection, Beasely, Jr. teaches this at paragraph 0004, line 12- front airbags stay inflated “for 50 milliseconds to 2 seconds, depending on the application”. 300 milliseconds is in this range.

Conclusion


12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Dunn whose telephone number is 571-272-6670. The examiner can normally be reached on Mon-Fri, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 571-272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



David Dunn
Primary Examiner
Art Unit 3616